Müəllimin adı: Vusal Ibrahimov

Fənnin adı: Management Accounting

Qrupun nömrəsi: 1044

**Mövzu 1: Introduction to management accounting and costing**

1. Is there a need for management accounting? Explain your opinion on the matter.
2. What is the difference between management accounting and financial accounting?
3. What is the relationship between costing and pricing? Explain and give your opinion on the matter.

**Mövzu 2: Cost classification and sources of data**

1. [Why](https://en.wikipedia.org/wiki/Francis_Fukuyama) there is a need to classify the costs?
2. Why there is a need for knowing Prime cost?
3. Explain what opportunity cost is and how it differs from differential cost?

**Mövzu 3: Cost behaviour**

1. Explain the relationship between the activity level and cost changes.
2. Is cost always dependent on the activity level? Explain your opinion on the matter.
3. What is the difference between step cost and semi-variable cost?
4. If you to be choose between "high-low" or "line of best fit" (scattergraph) method of determining the fixed and variable elements of semi-variable costs, which one would you choose and why?
5. Data about Company X is given in the following table:

|  |  |  |
| --- | --- | --- |
|  | **Cost** | **Production volume** |
| Month 1 | 17000 | 3000 |
| Month 2 | 25000 | 5000 |
| Month 3 | 11000 | 1500 |
| Month 4 | 13000 | 2000 |

Find fixed and variable elements of the Company X.

**Mövzu 4: Overhead cost and absorption costing**

1. Explain three stages of absorption costing: allocation, apportionment and absorption.
2. Department K production overheads are absorbed using direct labour hour rate. Budgeted production overheads for the department were $480 000 and the actual labour hours were 100 000. Actual production overheads amounted to $516 000. Based on the above data, and assuming that the production overheads were over absorbed by 24 000$, what was the overhead absorption rate per labour hour?
3. What is the base of apportionment? Give some examples.
4. The budgeted production overheads and other budget data of Company X are as follows:

|  |  |
| --- | --- |
| Budget | Cost |
| Overhead cost | 36 000$ |
| Direct materials | 32 000$ |
| Direct labour | 40 000$ |
| Machine hours | 10 000 |
| Direct labour hours | 18 000 |

What would be the absorption rate using various basis of apportionment?

1. % of direct material cost –
2. % of direct labour cost –
3. % of total direct cost –
4. Rate per machine hour –
5. Rate per direct labour hour –
6. Explain what Activity Based Costing (ABC) is and in which situations using ABC is more beneficial than using Absorption costing.

**Mövzu 5: Marginal costing and pricing decision**

1. Explain what is marginal costing and what difference between marginal and absorption costing is.
2. What is difference in inventory valuation between marginal costing and absorption costing?
3. Explain different type if pricing decisions and benefits and disadvantages of each type.
4. Company X makes a product which has a variable production cost of 21$ per unit and a sales price of 39$ per unit. At the beginning of 2017, there was no opening inventory and sales during the year were 50 000 units. Fixed costs (production, administration, sales and distribution) totaled 328 000$. Production was 70 000 units. Calculate the following:
5. The contribution per unit
6. The profit per unit
7. Company X expects to sell 10 000 tables in the coming year. The organization makes an annual investment of 1 700 000$ in production of tables and requires of 22% on its investment. The full cost of table is 15$. Calculate the required selling price of a table.

**Mövzu 6: Inventory valuation**

1. Why is it important to valuate inventory? Explain your opinion on the matter.
2. What type valuation methods are there? Explain what they are and which one would you use if you had your own company.
3. 800 notebooks valued at price of 4.20$ each were in inventory on 1 May.

The following receipts and issues were recorded during May:

|  |  |  |
| --- | --- | --- |
| 9 May | Received | 2500 notebooks at 4.50$ per unit |
| 21 May | Received | 1800 notebooks at 4.80$ per unit |
| 24 May | Issued | 4500 units |

Calculate the total value of the notebooks issued on 24 May using the LIFO method of inventory valuation.

1. Company X had the following information:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date |  | Unit | Unit Price | Value |
| 1 Jan | Balance b/f | 100 | 5.00$ | 500$ |
| 3 March | Issue | 40 |  |  |
| 4 June | Receipt | 50 | 5.50$ | 275$ |
| 6 June | Receipt | 50 | 6.00$ | 300$ |
| 9 September | Issue | 70 |  |  |

Calculate the closing balance of inventory using FIFO method of inventory valuation.

**Mövzu 7: Breakeven analysis**

1. Product N generates a contribution to sales ratio to 20%. Annual fixed costs are 80000$. Calculate breakeven point in terms of units sold per annum.
2. Draw and explain breakeven point chart.
3. Company X makes a single product and incurs fixed costs of 30 000$ per month. Variable cost per unit is 5$ and each unit sells for 15$. Monthly sales demand is 7000 units. Calculate the breakeven point in terms of monthly sales units.
4. Company X manufactures a single product:

Selling price per unit - 12$

Variable cost per unit - 8$

Fixed cost per month - 96000$

Budgeted monthly sales - 30000 units

Calculate the margin of safety, expressed as a percentage of budgeted monthly sales.

1. Explain limitations of breakeven analysis.
2. Company X manufactures a single product:

|  |  |
| --- | --- |
|  | $ per unit |
| Selling price | 6 |
| Variable production cost | 1.2 |
| Variable selling cost | 0.4 |
| Fixed production cost | 4 |
| Fixed selling cost | 0.8 |

Budgeted production and sales for the year are 10 000 units.

Calculate how many units must be sold in order to achieve a profit of 11000$ per year.

**Mövzu 8: Limiting factor analysis**

1. Company X manufactures three products, details of which are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Product A  $ per unit | Product B  $ per unit | Product C  $ per unit |
| Selling price | 105 | 133 | 133 |
| Direct materials (3$/litre) | 15 | 6 | 21 |
| Direct labour (8$/hour) | 24 | 32 | 24 |
| Variable overhead | 9 | 12 | 9 |
| Fixed overhead | 23 | 50 | 42 |

If the direct labor is restricted in supply, which product would be the most profitable to produce.

1. Company X manufactures three products, details of which are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Product A  $ per unit | Product B  $ per unit | Product C  $ per unit |
| Selling price | 30 | 36 | 34 |
| Direct materials | 8 | 10 | 20 |
| Direct labour | 4 | 8 | 3.6 |
| Variable overhead | 2 | 4 | 1.8 |
| Fixed overhead | 9 | 6 | 2.7 |

If the direct labour is in short of supply, rank the order of production.

1. Company X makes product N for which standard cost details are as follows:

Direct material (8$ per liter) - 72$ per unit

Direct labor (7$ per hour) - 49$ per unit

Production overhead - 56$

Demand for next period will be 2000 units but only 16 000 liters of material and 15 000 hours of labor will be available. What is going to be a limiting factor?

1. Company X manufactures three products, details of which are as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Product A  $ per unit | Product B  $ per unit | Product C  $ per unit |
| Selling price | 105 | 133 | 133 |
| Direct materials (3$/litre) | 15 | 6 | 21 |
| Direct labour (8$/hour) | 24 | 32 | 24 |
| Variable overhead | 9 | 12 | 9 |
| Fixed overhead | 23 | 50 | 42 |

If the direct labor is restricted in supply, which product would be the least profitable to produce.

**Mövzu 9: Standard costing**

1. Company X operate a bottling plant. The liquid content of a filled bottle product N is 2 litres. During the filling process there is a 30% loss of liquid input due to spillage and evaporation. The standard price of the liquid is 1.2$ per litre. Calculate the standard cost of the liquid per bottle (to the nearest cent).
2. Company X manufactures three products about which the following information is given:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Units produced** | **Standard time per unit**  **hours** | **Actual time taken**  **hours** |
| Product A | 270 | 1.2 | 330 |
| Product B | 80 | 0.7 | 50 |
| Product C | 140 | 1 | 135 |

Calculate the number of standard hours produced.

1. What are performance standards and how they can be used in order to increase of production efficiency.
2. An employee is paid according the following differential piecework scheme:

|  |  |
| --- | --- |
| Weekly output  Units | Rate of pay per unit  $ |
| 1-25 | 2.3 |
| 26-40 | 2.4 |
| 41 and above | 2.6 |

In addition he receives a guaranteed weekly wage of 420$. If an employee produces 28 units, what is going to be his gross salary?

1. Company X is in process of setting standard costs for the next period. Product F uses two tyoes of material, M and N. 6kg of material M and 5kg of material N are to be used, at a standard price of 2$ per kg and 3$ per kg respectively.

Three hours of skilled labor and one hour of semi-skilled labor will be required for each unit of F. Wage rates will be 8$ per hour for skilled and6$ per hour for semi-skilled labor.

Production overhead is to be absorbed at a rate of 4$ per labor hour. Ten per cent is to be added to total production cost to absorb administration, selling and distribution costs.

Calculate the standard cost per unit for F.

**Mövzu 10: Variance analysis**

1. Extracts from Company X record for the last month are as follows:

|  |  |  |
| --- | --- | --- |
|  | Budget | Actual |
| Production | 7000 units | 7200 units |
| Direct material cost | 42000$ | 42912$ |

Calculate total direct material cost variance.

1. Company X has the following information available:

Direct material cost - 8kg @ 0.80/kg = 6.40$ per unit

Budgeted production for April was 850 units

Actual production for April was 870 units. During the period 8200kg of materials were purchased at a price of 6888$ and 7150$ worth materials were issued to the production.

Calculate direct material price variance and usage variance for April.

1. Company X has the following information available:

Direct labour cost - 4.5 hours @6.40$ per hour

During March Company X produced 2300 units and incurred direct wages cost of 64150$. The actual hours worked were 11700.

Calculate the direct labor rate and efficiency variances for March.

1. Company X expected to produce 200 units. In fact 260 units were produced. The standard labor cost per unit was 70$(10 hours@7$ per hour). The actual labour cost was 18 600$ and the labor force worked 2200 hours although they were paid for 2300 hours.

Calculate:

Direct labor rate variance: \_\_\_\_\_\_\_\_\_\_\_

Direct labor efficiency variance:\_\_\_\_\_\_\_\_\_\_\_

Idle time variance: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Company X's records:

|  |  |  |
| --- | --- | --- |
|  | **Budget** | **Actual** |
| Production | 520 units | 560 units |
| Variable production overhead cost | 3120$ | 4032$ |
| Labour hours worked | 1560 | 2240 |

Calculate:

Variable production overhead total variance: \_\_\_\_\_\_\_\_\_\_\_

Variable production overhead expenditure variance:\_\_\_\_\_\_\_\_\_\_\_

Variable production overhead efficiency variance: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mövzu 11: Budgeting and budget prepation**

1. Explain why the budgeting is necessary tool for the enterprises.
2. Company X plans to sell 24000 units of product R next year. Opening inventory of R is expected to be 2000 units and Company X plans to increase inventory by 25% by the end of the year. How many units Company X needs to produce in order to achieve these targets?
3. Each unit of product N takes 5 hours of direct labour. 8% of units are rejected after completion as sub-standard. Next month's budgets are as follows:

Opening inventories of finished goods - 3000 units

Planned closing inventories of finished goods - 7600 units

Budgeted sales - 36800 units

All inventories of finished goods must have successfully passed the quality check.

Calculate the direct labor hours budget for the month.

1. What kind of budgets are there and what are their roles?
2. Company X's sales budget as follows:

|  |  |
| --- | --- |
|  | **$** |
| October | 224000 |
| November | 390000 |
| December | 402000 |

10% of sales are in cash immediately. Of the credit customers, 30% pay in the month following the sale and are entitled to a 1% discount. The remaining customers pay two months after the sale us made.

Calculate the sales receipt shown in CompanyX's cash budget in December.

**Mövzu 12: Cost bookkeeping**

1. The following data is given about Company X:

Opening inventory 18 500$

Closing inventory 16 100$

Deliveries from suppliers 142 000$

Returns to suppliers 2 300$

Cost of indirect materials issued 15 200$

Please give double entries in cost accounts.

1. Company X uses an integrated standard costing system and inventories are valued at standard price. In October, when 2400 units of the finished product were made, the actual material cost details were as follows:

Material purchased 5000 units @ 4.5$ each

Material used 4850 units

The standard cost details are that 2 units of the material should be used for each unit of the completed product, and the standard price of each material unit is 4.7$.

Please make entries in the variance accounts.

1. What is integrated bookkeeping and what are advantages and disadvantages of it.
2. The ledger accounts for Company X contain the following information. WIP account has wages input of 26 200$. The production overheads amount to 31 500$. There was no opening inventory but the inventory which was completed and transferred to the finished goods account amounted to 304 660$. The value of closing inventory was 61 520$.

Please, calculate the value of raw materials brought into production.

**Mövzu 13: Process costing**

1. Process B had no opening inventory. 13 500 units of raw materials were transferred in at 4.5$ per unit. Additional material at 1.25$ per unit was added in process. Labour and overheads were 6.25$ per completed unit and 2.5$ per unit complete. If 11 750 completed units were transferred out, what was the closing inventory in Process B?
2. Explain what are by-product and joint product and how their cost bookkeeping is conducted.
3. A chemical is manufactured in two processes, X and Y. Data for process Y for last month is as follows.

|  |  |
| --- | --- |
| Material transferred from process X | 2000 litres @ 4$ per liter |
| Conversion costs incurred | 12 250$ |
| Output transferred to finished goods | 1600 litres |
| Closing WIP | 100 litres |

Normal loss is 10% of input. All losses are fully processed and have a scrap value of 4$ per liter. Closing WIP is fully complete for material, but is only 50% processed.

What is the value of the completed output \_\_\_\_\_\_\_\_\_\_\_\_?

What it the value of the closing WIP \_\_\_\_\_\_\_\_\_\_ ?

1. A product is manufactured as a result of two processes, 1 and 2. Details of process 2 for the latest period were as follows:

|  |  |
| --- | --- |
| Material transferred from process 1 | 10000kg @ 40 800$ |
| Labour and overhead costs | 8 424$ |
| Output transferred to finished goods | 8 000 kg |
| Closing WIP | 900 kg |

Normal loss is 10% of input and losses have a scrap value of 0.3kg. Closing WIP is 100% complete for material, and 75% complete for both labour and overheads.

What is the value of the completed output \_\_\_\_\_\_\_\_\_\_\_\_?

What is the value of the closing WIP \_\_\_\_\_\_\_\_\_ ?

What is the value of abnormal loss \_\_\_\_\_\_\_\_\_?

1. Explain what is process costing and why there is a need for separate costing method.
2. Company X used an input of 3500kg of materials at 20$ per kg and labour hours of 2750 at 25$ per hour. Normal loss is 20% and losses can be sold at a scrap value of 5$ per kg. Output was 2 950kg. What is the value of the output?

**Mövzu 14:** **Job, batch, contract and service costing**

1. The following information is given about the Company X:

Contract price: 11 200 000$

Cost of work certified to date: 3 763 200$

Estimated costs to completion: 2 956 800$

No difficulties are foreseen on the contract.

The profit to be recognized on the contract to date is \_\_\_\_\_\_\_\_\_\_\_\_?

1. Give explanations to job, batch, contract and service costing.
2. Company X operates a job costing system. The company’s standard net profit margin is 20% sales value. The estimated costs for job B are as follows:

Direct materials – 3kg@5$ per kg

Direct labour – 4 hours @ 9$ per hour

Production overheads are budgeted to be 240 000$ for the period, to be recovered on the basis of a total of 30 000 labour hours. Other overheads, related selling, distribution are budgeted to be 150 000$ for the period. They are to be recovered on the basis of the total budgeted production cost of 750 000$ for the period. What is the price to be quoted for job B?

1. A construction company has the following data concerning one of its contracts:

Contract price - 2 000 000$

Value certified – 1 300 000$

Cash received – 1 200 000$

Costs incurred – 1 050 000$

Cost of work certified – 1 000 000$

What is the notional profit?

1. What are the specific characteristics of service costing?

**Mövzu 15:** **Mixed**

1. In a period, there was an adverse labour efficiency variance of 27 000$. The standard wages rate per hour was 6$ and 30 hours were allowed for each unit as standard. Actual labour hours worked were 52 500. What was the number of units produced in the period?
2. Information about Company X:

|  |  |  |
| --- | --- | --- |
|  | Year 1 | Year 2 |
| Sales | 160000 | 120000 |
| Direct materials | 40000 | 20000 |
| Direct labour | 40000 | 30000 |
| Production overhead | 22000 | 20000 |
| Marketing overhead | 42000 | 35000 |
| Profit | 16000 | 15000 |

Calculate the change in gross profit margin between Year 2 and Year 1.

1. The following information is available:

|  |  |  |
| --- | --- | --- |
|  | Labour hours worked on unit | Machine hours worked on unit |
| Department A | 1 | 5 |
| Department B | 2 | 7 |
| Department C | 6 | 1 |
| Overhead absorption rates | | |
| Department A | 13.31$ per machine hour | |
| Department B | 10.50$ per machine hour | |
| Department C | 5.22$ per labour hour | |

Please, calculate the total production overhead cost.

1. The following information is available about Company X:

|  |  |  |
| --- | --- | --- |
|  | Cost center 1 | Cost center 2 |
| Direct material cost per unit | 171$ | 67$ |
| Direct labour hours per unit | 5 | 11 |
| Direct labour rate per hour | 15$ | 34$ |
| Production overhead absorption rate per direct labour hour | 19.5$ | 4.1$ |

General overhead costs are absorbed into product costs at a rate of 40% of production cost. Calculate total production cost per unit.

1. The following data relate to product L.

Material cost per unit – 57.5$

Labour cost per unit – 17.9$

Production overhead cost per machine hour – 14.10$

Machine hours per unit – 11 hours

General overhead absorption rate – 20% of production cost.

Please, calculate the total production cost per unit.

1. Company X uses a standard cost system. The actual price for raw materials was less than the standard price. Aldo during the last period, the labour hour rate paid was less than the standard rate. What are the correct double entries?
2. Information about the Company X is as below:

|  |  |
| --- | --- |
| Sales revenue | 820 000 |
| Variable production costs | 300 000 |
| Variable selling costs | 105 000 |
| Fixed production costs | 180 000 |
| Fixed selling costs | 110 000 |

Opening inventory – 0, Closing inventory – 150, Production – 1000 units.

Using marginal costing calculate the profit.

1. Company X uses absorption costing:

|  |  |  |
| --- | --- | --- |
|  | Budget | Actual |
| Output and sales (units) | 17 400 | 16 400 |
| Selling price per unit | 25$ | 30$ |
| Variable cost per unit | 15$ | 15$ |
| Total fixed overheads | 42 500$ | 45 800$ |

What was the sales price variance?

1. Company X is a cola drink manufacturer. The liquid content of one bottle of cola is 4 litres. During the filling process there is a 25% loss of cola input due to spillage and evaporation. The standard material price of the cola is 2$ per liter. What is the the standard cost of the cola per bottle?
2. If you to decide which kind of costing method to implement in the private company, what would be your choice and why?